217/782-2113

CONSTRUCTION PERMIT -- REVISED

PERMITTEE

PPG Industries, Inc.
Attn: Kathryn Oman, Environmental Engineer
Mt. Zion & Elwin Road
Mt. Zion, Illinois 62549

Application No.: 02100029 I.D. No.: 115810AAA
Applicant's Designation: Line #1 Date Received: May 27, 2003
Subject: Line #1 Glass Furnace Rebricking
Date Issued:
Location: Mt. Zion and Elwin Road, Mt. Zion

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of rebricking the line #1 glass furnace as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1.0 Unit Specific Conditions

1.1 Line #1 Glass Furnace Rebricking

1.1.1 Description

The cold repair project involves rebricking of the Line #1 glass furnace, i.e., replacing worn refractor and repairing other furnace components such as the cooling and electrical systems, which are more safely repaired when the furnace is cold. The rebricking does not involve any change to production capacity or glass melting area of the furnace. The rebricking will improve efficiency and safety of the furnace and should reduce actual emissions from current levels.

1.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Float Glass Line #1	750 Ton/Day Glass Furnace, Fired By Natural Gas	Lime Injection and Electrostatic Precipitator

1.1.3 Applicability Provisions and Applicable Regulations

a. The affected furnace for the purpose of these unit-specific conditions is the glass furnace described in Conditions 1.1.1 and 1.1.2.

b. The affected furnace is subject to 40 CFR 60 Subpart CC, New Source Performance Standards for glass manufacturing plants. The Permittee must comply with all applicable requirements of this subpart.

c. The affected furnace, when it was built, constituted a major new source subject to the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 42.21. The Permittee must comply with all applicable requirements for the affected furnace under PSD, which requirements are not relaxed by this permit.

1.1.4 Non-Applicability of Regulations of Concern

This permit is issued based upon this rebricking project not constituting a major modification in accordance with 40 CFR 52.21, Prevention of Significant Deterioration of Air Quality (PSD), because the potential increases in emissions from the affected furnace are less than the PSD significant net emission increase thresholds. (See also Attachment A.)

1.1.5 Operational and Production Limits and Work Practices

a. Natural gas shall be the primary fuel fired in the affected furnace; backup fuels shall include propane and No.2 fuel oil.

b. The maximum firing rate of the affected furnace shall not exceed 211 million Btu/hour.

c. The production rate of the affected furnace shall not exceed 750 tons per day.

1.1.6 Emission Limitations

a. i. Emissions of nitrogen oxides from the affected glass-melting furnace shall not exceed 411 pounds per hour. The emissions of sulfur dioxide from the affected glass-melting furnace shall not exceed 50 pounds per hour.

ii. Emissions from the affected glass-melting furnace shall not exceed 13.2 lbs. nitrogen oxides per ton of glass produced by the furnace and 1.6 pounds sulfur dioxide per ton of glass produced by the furnace when the furnace is operating at the design capacity of 750 tons per day.

iii. This condition represents the application of the Best Available Control Technology as required by Section 165 of the Clean Air Act.

b. PM/PM_{10} emissions from the affected furnace shall not exceed the limits in Attachment A Table II.

c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

1.1.7 Operating Requirements

General requirements of the CAAPP permit with respect to retention and availability of records and submission of reports shall apply to the recordkeeping and reporting requirements of this permit.

1.1.8 Monitoring Requirements

None

1.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected furnace to demonstrate compliance with Conditions 1.1.5 and 1.1.6:

a. Production rate (tons/day, tons/month, tons/year).

b. Fuel consumption, as determined directly from fuel meters or indirectly from operating hours of the burners and their rated capacity.

c. An operating and maintenance log for the affected furnace.

1.1.10 Reporting Requirements

a. The Permittee shall promptly notify the Illinois EPA of noncompliance of the affected furnace with the permit requirements. Reports shall describe the deviation, the probable cause of such deviations, and any corrective actions or preventive measures taken. These deviations may be reported in the periodic report required by the NSPS or otherwise within 30 days.

b. The Permittee shall supply the Illinois EPA with the following information once the rebricking of the affected furnace is complete:

i. Startup date of the affected furnace once rebricking is complete.

ii. A detailed listing of work completed on the affected furnace during the rebricking project.

1.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee may operate the affected furnace following rebricking pursuant to this permit for a period of one year, during which time the Permittee shall obtain a revised CAAPP permit that addresses the rebricked furnace.

1.1.12 Compliance Procedures

To determine compliance with the emission limits in Condition 1.1.6(a), emissions from the affected furnace shall be calculated based on representative emission factors based on testing of the furnace, with consideration and adjustment, as appropriate, for actual operation of the furnace and associated control device. Based on the most recent tests as provided in the application, these emission factors are as follows:

Pollutant	Emission Factor
NO_x	13.2 Lb/Ton
SO_2	1.6 Lb/Ton
PM/PM10	0.46* Lb/Ton

*Actual PM emissions rate. This is different from the adjusted PM emission rate pursuant to 40 CFR 60.296(d)(I) which is used to evaluate compliance with the NSPS.

Please note PPG has, in a good faith effort, agreed to submit this application pending USEPA's ruling whether rebricking of a float glass furnace is routine maintenance and repair. At such time that a determination is made by USEPA, PPG may either continue to construct and operate under this permit, as provided by the normal state permitting process, or withdraw this permit depending on whether USEPA determines that rebricking is routine maintenance and repair.

Please note Condition 1.1.6(a) of this permit has been revised to clarify Best Available Control Technology as it pertains to NO_x and SO_2 emissions.

If you have any questions on this, please call Kevin Smith at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:KLS:psj

cc: Region 3

Attachment A

Table I
Past Actual Emissions (Tons/year)

Pollutant	Baseline Years	Emissions
SO_2	00-02	71.3
NO_x	00-02	1749.4
PM/PM_{10}	00-02	48.9

Table II
Proposed Emission Limits (Tons/Year)

	Emissions	
Pollutant	Lb/Hr	Tons/Yr
SO_2	50	111
NO_x	411	1,789
PM/PM_{10}	---	61.6

Table III
Net Emission Increase (Tons/Year)

	PM/PM_{10}	SO_2	NO_x
Table I	48.9	71.3	1,749.4
Table II	61.6	111	1,789
Net Change	12.7	39.7	39.6

KLS:psj